

What is claimed is:

1. A method of treating ocular disorders involving angiogenesis, comprising the steps of:

5 providing a trans-scleral drug delivery device comprising:

an insert stabilizer for attachment to a scleral surface and having an interlock opening;

10 a replaceable implant having a reservoir adjacent the scleral surface and an interlock tab, wherein said insert stabilizer and said replaceable implant are removeably connectable by mating said interlock tab and said interlock opening; providing an anti-angiogenic factor; introducing said anti-angiogenic factor into said reservoir; and attaching said insert stabilizer to the scleral surface.

15 2. The method of treating ocular disorders as set forth in claim 1, wherein the anti-angiogenic factor is carboxyamido-triazole (CAI).

20 3. The method of treating ocular disorders as set forth in claim 1, wherein said trans-scleral drug delivery device further comprises an injection port in said insert stabilizer and a tube in said replaceable implant that fluidly connects said reservoir with said injection port and wherein the step of placing said anti-angiogenic factor in said reservoir further comprises injecting said anti-angiogenic factor into said reservoir through the injection port and the tube.

4. The method of treating ocular disorders as set forth in claim 1, wherein the step of providing an anti-angiogenic factor further comprises providing said factor in pellet form and the step of introducing the anti-angiogenic factor into said reservoir further comprises placing the pellet directly in said reservoir.

5. The method of treating ocular disorders as set forth in claim 1, wherein said insert stabilizer further comprises at least one eyelet and wherein the step of attaching said insert stabilizer to the scleral surface comprises suturing said stabilizer to the scleral surface via the eyelet.

6. The method of treating ocular disorders as set forth in claim 1, further comprising the steps of refilling said trans-scleral drug delivery device by disengaging said replaceable implant from said insert stabilizer while leaving said insert stabilizer attached to the scleral surface, introducing a new dosage of anti-angiogenic factor in said reservoir, and reconnecting said replaceable implant with said insert stabilizer.

7. The method of treating ocular disorders as set forth in claim 1, further comprising the step of refilling said trans-scleral drug delivery device by injecting a new dosage of anti-angiogenic factor in a liquid form into said reservoir through an injection port.

8. A method of treating ocular disorders involving angiogenesis, comprising the steps of:

providing a two-piece, interlocking, trans-scleral delivery device having a first piece attached to a scleral surface and a second piece having a reservoir; and

administering an anti-angiogenic factor in pellet form to the scleral surface via the reservoir of the trans-scleral delivery device.

9. The method of treating ocular disorders as set forth in claim 8, wherein the anti-angiogenic factor is carboxyamido-triazole (CAI).

10. The method of treating ocular disorders as set forth in claim 8, wherein the trans-scleral delivery device includes a reservoir adjacent the scleral surface and wherein the step of administering the anti-angiogenic factor further comprises placing said pellet within the reservoir, or injecting a liquid formulation via an injection port.

11. The method of treating ocular disorders as set forth in claim 8, further comprising the step of refilling the trans-scleral delivery device by disconnecting said second piece from said first piece, introducing a new pellet of anti-angiogenic factor into said reservoir, and reconnecting said second piece with said first piece.

12. A method of treating ocular disorders involving angiogenesis, comprising the steps of:

providing a trans-scleral drug delivery device comprising:

an insert stabilizer for attachment to a scleral surface and having an interlock opening and an injection port;

a replaceable implant having a reservoir adjacent the scleral surface and an interlock tab, wherein said insert stabilizer and said replaceable implant are removeably connectable by mating said interlock tab and said interlock opening and wherein said injection port communicates with said reservoir;

providing an anti-angiogenic factor;

introducing said anti-angiogenic factor into said reservoir;

attaching said insert stabilizer to the scleral surface; and

refilling said trans-scleral drug delivery device alternately and selectively by

disengaging said replaceable implant from said insert stabilizer, placing a new dosage of angiogenic factor in a pellet form in said reservoir, and re-interlocking said replaceable implant with said insert stabilizer, and injecting a new dosage of angiogenic factor in liquid form in said reservoir through the injection port.

13. The method of treating ocular disorders as set forth in claim 12, wherein the anti-angiogenic factor is carboxyamido-triazole (CAI).

14. A method of treating ocular disorders involving angiogenesis, comprising the steps of:

providing a trans-scleral drug delivery device comprising:

an insert stabilizer for attachment to a scleral surface and having an interlock opening;

a replaceable implant having a reservoir adjacent the scleral surface and an interlock tab;

interlocking said insert stabilizer and said replaceable implant by connecting said interlock tab and said interlock opening;

providing a pellet of carboxyamido-triazole; and

placing said pellet in said reservoir;

attaching said insert stabilizer to the scleral surface; and

refilling said trans-scleral drug delivery device by disengaging said replaceable implant from said insert stabilizer, placing a second pellet of carboxyamido-triazole in said reservoir, and re-interlocking said replaceable implant with said insert stabilizer.

15. An ophthalmic, trans-scleral drug delivery device, comprising:
an insert stabilizer for attachment to a scleral surface and having an interlock
opening;

a replaceable implant having a reservoir adjacent the scleral surface and an
interlock tab; and

wherein said insert stabilizer and said replaceable implant are removeably engaged
by connecting the interlock opening and interlock tab.

16. The ophthalmic, trans-scleral drug delivery device as set forth in claim 15,
wherein said insert stabilizer has first and second ends, said interlock opening located at
the first end and said second end having a relatively narrower width than said first end.

17. The ophthalmic, trans-scleral drug delivery device as set forth in claim 16,
wherein said first end further comprises at least one eyelet.

18. The ophthalmic, trans-scleral drug delivery device as set forth in claim 15,
wherein said first end defines an injection port.

19. The ophthalmic, trans-scleral drug delivery device as set forth in claim 17,
wherein said replaceable implant has first and second ends, said reservoir located at the
first end and said interlock tab located at the second end, and wherein the replaceable
implant further includes a tube passing through an interior length of the implant and
fluidly connecting the reservoir and the second end of the implant.

20. The ophthalmic, trans-scleral drug delivery device as set forth in claim 18,
wherein said tube fluidly communicates with said injection port when the interlock tab
and interlock opening are connected.

21. The use of carboxyamido-triazole for trans-scleral administration to a human patient experiencing ocular angiogenesis.